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EXAMINER	
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3629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/536,692	VILLENA ET AL.	
	Examiner	Art Unit	
	Dennis Ruhl	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *75-78,80-83,86,87,92-103,105,107 and 112* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,75-78,80-83,86,87,92-103,105 and 107* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/19/07 has been entered.

The examiner will address applicant's arguments and remarks at the end of this office action. Currently claims 75-78,80-83,86,87,92-103,105,107,112 are pending.

With respect to the amendment to paragraph 84, the new paragraph has not been entered because there is no indication as to what the changes are that are being made. The amendment to paragraph 84 does not comply with 37 CFR 1.121. A marked up copy of the paragraph is required so the examiner can quickly determine what the changes are. This has not been done.

2. The amendment filed 12/28/06 is still objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure and based on the fact that the new paragraph 84 is not currently being entered for failure to comply with 37 CFR 1.121. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The language added to paragraph 84 is considered to be new matter. While the specification as originally filed did disclose that the database can contain data for all known properties in a given region, as well as disclosing that there

can be less than all the known properties in the database, the specification as originally filed does not provide support for the definition of "substantial portion", and "a majority of properties" as had been added to the specification. Also, the language reciting that various terms may apply to various subgroups is also considered to be new matter. In the response of 12/28/06, on page 14, applicant stated that support for this amendment was found in original claims 1,2, and 10. Claims 1,2, and 10 do not provide support for this new language that has been added to paragraph 84. Upon a review of the originally filed specification as well as original claims, the examiner cannot find support for what is claimed. If applicant believes that this language is not new matter, than a further explanation of where support can be found in the specification as originally filed should be provided for the examiner to review.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. The amendment filed 6/27/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

With respect to claims 77,78,98,99, the examiner feels that these claims contain new matter. There does not appear to be support in the specification as originally filed for the language reciting that there can be "one or more icons each associated with at least one second property" (claim 77) and "a plurality of icons each associated with a second property" (claim 78) within the map. Applicant has stated that originally filed

paragraphs 28 and 81 provide support for this language. While claim 28 does provide support the use of graphical maps for the displaying of results, this alone does not support the totality of what is claimed. Paragraph 81 does disclose the use of icons on a map that represent the various properties and discloses that when the user clicks on a particular property icon, a pop up window is displayed to the user where various information is displayed. Each property only has one icon, not more than one. The claims recite that each property can have more than one icon. Paragraph 81 does not disclose that there could be an icon, an AVM value, and a DVS value as claimed on the map, for a total of three things which is in the scope of claim 99. As the examiner best understands the disclosure in the specification, the map has icons that represent the various properties (each property only has one icon) and when one clicks on a particular property icon, another window is displayed where the AVM value and other data can be displayed to the user. The claim has a scope where there can be 3 things on the map, whereas the specification only seems to disclose a property icon that when selected will result in a pop up window to appear. The examiner does not see how this disclosure supports what is claimed, as these claims are best understood by the examiner.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. The following is a quotation of 37 CFR 1.71(a)-(c):

> (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.
>
> (b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.
>
> (c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

5. The specification is objected to under 37 CFR 1.71 because it contains new matter that is not supported in the specification as originally filed.

With respect to the amendment to paragraph 84, the new paragraph has not been entered because there is no indication as to what the changes are that are being made. The amendment to paragraph 84 does not comply with 37 CFR 1.121. A marked up copy of the paragraph is required so the examiner can quickly determine what the changes are. This has not been done.

The language that was added to paragraph 84 is considered to be new matter. While the specification as originally filed did disclose that the database can contain data for all known properties in a given region, as well as disclosing that there can be less than all the known properties in the database, the specification as originally filed does not provide support for the definition of "substantial portion", and "a majority of properties" as had been added to the specification. Also, the language reciting that various terms may apply to various subgroups is also considered to be new matter. In the response of 12/28/06, on page 14, applicant stated that support for this amendment

was found in original claims 1,2, and 10. Claims 1,2, and 10 do not provide support for this new language that has been added to paragraph 84. Upon a review of the originally filed specification as well as original claims, the examiner cannot find support for what is claimed. If applicant believes that this language is not new matter, than a further explanation of where support can be found in the specification as originally filed should be provided for the examiner to review.

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 75-78,80-83,86,87,92-94 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 75 is an apparatus type of statutory claim, but the language "and wherein each AVM value of the plurality of properties *is modified routinely and at a rate* such that the AVM value reflects an estimate designed to be generally current based on changes in the relevant housing market of each property" is a method step of actually doing a step of updating the AVM values. This renders claims 75-78,80-83,86,87,92-94 as non-statutory. This is because claim 75 is mixing both distinct statutory classes of invention of an "apparatus" and a "method". In apparatus claims any recitation of actually using recited structure of the apparatus renders the claims as non-statutory. In this case applicant is reciting that the AVM values are being updated. Ex parte Lyell 17 USPQ2d 1548 (Bd. Pat. App. & Int 1990) ; IPXL Holdings, L.L.C. v Amazon.Com, Inc., 430 F.3d 1377, 1384 (Fed. Cir. 2005). The examiner again suggests claiming that the structural element responsible

for this function (possibly the query device?) is "configured to repeatedly update the AVM values based on changes in the relevant housing markets" to overcome this rejection.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 77,78,98,99, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are rejected for the reasons that are set forth in the objection to the amendment of 6/27/07. The claims are considered to contain new matter.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 75-78,80-83,86,87,92-94,96,109, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 76,96,109, applicant claims that the query device is configured to perform a differential value search. This search is claimed as being "based on a

difference in value between a property's AVM value and an offer for sale value". The examiner believes that "essential" subject matter is missing from the claim scope. It seems to the examiner that the data of "an offer for sale value" would be required to be in the database so that this search is able to be performed. Because the only data recited in the scope of claims 76,96, is the property identifier and the AVM value from claims 75 and 95, unless the "offer for sale" data is also claimed, not enough data is present in the scope of the claim to allow the differential value search to occur. Claim 76 is lacking in essential elements that are required to allow the claimed function to occur.

For claims 75-78,80-83,86,87,92-94, one wishing to avoid infringement would not be reasonably made aware of the scope of the claimed invention. This is because claim 75 contains a method recitation. Claim 75 is an apparatus type of claim but the language "and wherein each AVM value of the plurality of properties *is modified routinely and at a rate* such that the AVM value reflects an estimate designed to be generally current based on changes in the relevant housing market of each property" is a method step of actually doing a step of updating. It is not clear if just having the claimed structure of the system would be infringement, or if one would need to have the claimed system and "update" the AVM values to be infringing. This renders the claim as indefinite. Ex parte Lyell 17 USPQ2d 1548 (Bd. Pat. App. & Int 1990) ; IPXL Holdings, L.L.C. v Amazon.Com, Inc., 430 F.3d 1377, 1384 (Fed. Cir. 2005).

For claim 94, what is being referred to by the language "so as to enable **them**"? Who are them? Is this the customers, their PC display, or is this referring to the claimed information system? This is not clear.

For claim 96, applicant claims "wherein the step of performing AVM-related queries includes". Claim 95 recites "performing one or more AVM-related queries? Is the scope of the claim directed to "one or more" queries as is recited in claim 95, or is the scope of the claim directed to a plurality of AVM queries? This is not clear due to the contradictory language between claims 95 and 96.

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 75,92-95,101,102,107, are rejected under 35 U.S.C. 102(b) as being anticipated by Foretich et al. (20030191723).

For claims 75,95, Foretich discloses a system and method for determining AVM values for properties, such as residential properties. Foretich determines valuation values by using a computer program contained on a server, see paragraph 26. Foretich discloses that customers use remote terminals 10,20 (or other types of communication devices) to access the property valuation system via the Internet 50. See paragraph 25 where this is disclosed. The claimed "one or more databases" that contain records on a plurality of residential properties are the databases 60 and/or 70. See paragraph 26

where the databases are disclosed. The databases store records relating to residential properties as claimed. As an example, see Table 1 where various types of stored property data are disclosed and in paragraph 44 this is referred to as a property record. This property record data includes property identifiers, such as address, listing ID, or even a tax record, which satisfies the claimed "identifier of a respective property". Foretich discloses the storing of property identifiers that identify the various properties stored in the databases. With respect to the AVM value being stored in the database, applicant is referred to paragraphs 15 and 162 where this is disclosed. Paragraph 15 discloses "*knowledge base databases created and maintained by the system of the present invention may include valuation values and comparable information previously calculated and used by they system of the present invention*". Paragraph 162 discloses "*Another aspect of the present invention which has been referred to herein is the fact that the system of the present invention, using either local or remote databases, can store various classes of information derived during the valuation process for use in later valuations or other processes. For example, as the system generates valuations, it is preferable that these valuations and data used in connection with these valuations be stored for later use if desired. Actual valuation numbers may be stored and may be employed as comparables for later valuations as appropriate as long as property information is either stored directly in the knowledge base database or can later be retrieved from other databases such as MLS and/or public record databases.*". Foretich discloses that the AVM values are stored in the databases, which satisfies what is claimed. The language reciting that the database "contains records on a plurality of

residential properties in a first geographic region" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The "query device" is considered to be the server 90, that is coupled to the databases and is responsible for running the software applications that control the operation of the invention of Foretich, such as the software that performs the property valuations. See paragraph 26 where server 90 is disclosed. The "display device" that is configured to provide display information (the results) is interpreted to be the portion of the server 90 that is responsible for providing the query results to an input/output device (i.e. modem), so that the results can be sent via the Internet to the customer. The "input/output device" is the hardware and software that is necessarily required to allow data communication to occur via the Internet, such as a modem, a databus, and the associated software that allows for the output of data to occur. This structure also allows for the receipt of query terms from customers as claimed. The system of Foretich inherently has an input/output device because of the fact that the query results are output. The query results can be sent over the Internet to the requestor (customer) or can be printed, both of which required an output device.

For claim 75 in addition to that already addressed, the system of Foretich is configured to update the valuation values (AVM) as claimed. All a person has to do is run another valuation for the property and that satisfies what is claimed. A person can run as many valuations as they desire in any given time period. A person can submit a request for a valuation every 6 months if they want to. Foretich has this ability, which satisfies what is claimed. The examiner is interpreting the method limitation in claim 75

as reciting the ability to update the AVM values because in system claims there cannot be any actual method steps being performed. The language has been given weight to this extent. Anytime the valuation is repeated, such as when someone is looking to buy the house from a previous purchaser of the house, as compared to the last valuation, this new valuation would be "generally current", because it was done with the most up to date data that reflects the current market conditions. Also, in paragraph 15, it is disclosed that the databases are "continuously updated", and this includes the databases that have the stored AVM value. This also satisfies what is claimed.

For claim 95, in addition to that address above, in paragraph 15, it is disclosed that the databases are "continuously updated", and this includes the databases that have the stored AVM values. This satisfies what is claimed.

For claims 92,93,101, Foretich discloses data for residential properties, such as single-family homes, townhouses, and condominiums. See paragraph 66 where this is disclosed. Foretich discloses the claimed elements. The language reciting that the database contains records "in a county" or "in at least two counties" or "in at least two states" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The geographic boundaries set by people lend no structure to the claimed system. Data is data, the mere fact that humans recognize jurisdictions such as counties and states does not change what is claimed, which is property data records stored in the database (single family homes, townhouses, and condominiums). Foretich discloses structure that satisfies what is claimed.

For claims 94,102,107, the system of Foretich is configured to provide information to the remote terminals that indicates a measure of confidence. See paragraphs 158 and 161 where it is disclosed that the results that are provided to the customer include the "standard deviation" value for the valuation. Standard deviation is a statistical measure of confidence as to the accuracy of the valuation. This satisfies what is claimed.

14. Claims 75,92,93,95, are rejected under 35 U.S.C. 102(b) as being anticipated by Sklarz et al. (2002/0087389) .

For claims 75,95, Sklarz discloses a system and method of providing AVM values to customers (includes investors). Sklarz uses computers and software to provide a valuation, which is an AVM. The system is shown in figure 1. This is also mentioned in paragraph 18 where it is disclosed that an algorithm is used to calculate the valuation. The public network is the Internet 107, see figure 1 and paragraph 51. The one or more databases is satisfied by the VYH database 102, that is disclosed as storing all kinds of data relating to properties. This database contains property records as claimed. It is disclosed that this data can be MLS data or even tax record data, see paragraph 47. This kind of data inherently includes property identifiers as that is the only way one can differentiate between various properties. MLS listings inherently contain property identifiers, such as an address. The query device is 103 and in paragraph 56 it is disclosed that device 103 is responsible for conducting the query. The display device is considered to be 106. This device provides information to the

input/output device 108, so that results can be sent via the Internet to customers. The device 108 receives queries and transmits information to the remote terminals (PCs 110). With respect to the limitation that the AVM value is also stored in the database, the examiner refers applicant to paragraphs 56 and 213. Paragraph 56 discloses that received "*query data is pre-checked against the query metadata stored in the VYH database*". Paragraph 213 discloses that "*The VYH server software caches queries, and the response generated by a query, for a period of time ("cache period") selected by the operator of a VYH service. By accessing cached queries and responses, the VYH invention accelerates the provision of responses when the same query is received within the cache period.*" Because the result of the queries is an AVM, this section is disclosing that the AVM values are to be stored, so that if another query for the same property is received, the computer process of recalculating the AVM is avoided and the already generated results can simply be sent to the customer.

For claim 75 in addition to that already addressed, the system of Sklarz is configured to update the valuation values (AVM) as claimed. All a person has to do is run another valuation for the property and that satisfies what is claimed. A person can run as many valuations as they desire in any given time period. A person can submit a request for a valuation every 6 months if they want to. Sklarz has this ability, which satisfies what is claimed. Anytime the valuation is repeated, such as when someone is looking to buy the house from a previous purchaser of the house, as compared to the last valuation that has been run, this new valuation would be "generally current", because it was done with the most up to date data that reflects the current market

conditions. The valuations can be repeatedly updated if one so desires. Also see paragraphs 51 and 93 where updates to the database is disclosed, which also satisfies what is claimed.

For claim 95, in addition to what has already been addressed, see paragraphs 51 and 93 where updates to the database is disclosed, which also satisfies what is claimed.

For claims 92,93, the database 102 contains data on properties, that includes MLS listing data. The examiner takes "official notice" of the fact that MLS data includes data on single-family homes, town homes, and condominiums. Also see paragraph 86 where single-family homes is disclosed. This satisfies what is claimed. The language reciting that the database contains records "in a county" or "in at least two counties" or "in at least two states" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The geographic boundaries set by people lend no structure to the claimed system. Data is data, the mere fact that humans recognize jurisdictions such as counties and states does not change what is claimed, which is property data records stored in the database (single family homes, townhouses, and condominiums). However, the examiner does note that figure 3 shows that the user can select a given state or county, so this then means that there is property data stored for different states, counties, etc., as applicant has claimed.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 76,80-82,95-97,100,112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Foretich et al. (20030191723).

For claims 76,96, not disclosed is that the query device is configured to perform a "differential value search (DVS)". Applicant has claimed that the DVS is based on a difference between a property's AVM (valuation) and an offer for sale for the property. Conceptually, this is a comparison of the price that one is selling a home for, to the valuation value (AVM) for that home. The examiner notes that paragraph 162 discusses the storing of AVM values in the databases. Disclosed is that the valuations

are stored "*for later use*" and "*for use in later valuations or other processes*" and "*may be employed as comparables for later valuations as appropriate*". This paragraph teaches the desirability of storing the AVM value so that that AVM value can be used in later processing. Paragraph 15 also discusses the use of AVM values in further processing. The AVM value is a type of data that a person of ordinary skill in the art is going to be concerned with. Anyone buying a house or giving out a financial loan for a house, is concerned with the value of the house itself (valuation/AVM). That idea is just common sense and is something that anyone who buys products of any kind recognizes. As a purchaser of a given product, you take into consideration the sale price for the product and decide if that price is acceptable for the "value" of the product that you are to receive. In other words, a purchaser asks the question "is the product worth the price?". The importance of the AVM value is also evidenced by paragraph 6, where it is disclosed that "*Since the loan to value ratio is of great significance to lenders in making loan decisions as well as in determining applicable loan programs and interest rates, it is almost always necessary for a property valuation to be undertaken in connection with the lending process.*" One of ordinary skill in the art, such as a mortgage broker, is interested in the comparison of the price for a given property to the value of that property. In this case, the loan value for a mortgage lender is essentially the "offer for sale" price, as this is the price the seller is willing to sell the property for. The mortgage lender is making a comparison of the offer for sale (loan value) value to the value of the property, which is determined by the valuation process that is performed by server 90. While this comparison is disclosed as being a ratio, it does

teach the comparison of the two claimed types of data (offer and AVM). The prior art and one of ordinary skill in the art already recognize the importance of comparing the offer price to the valuation for real estate property. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Foretich to allow for a search of the database based on a difference between a property's "offer for sale" price and the valuation value for that property, that is also stored in the database. Both the offer price and AVM value are going to be stored in the database, this is disclosed by Foretich. One of ordinary skill in the art at the time the invention was made, taking into account the disclosure of Foretich, and taking into account the level of knowledge that one of ordinary skill in the art is in possession of, would have found it obvious to allow for searching based on the difference between the offer price and the valuation (AVM) that is stored in the database as this is another way that one can compare the offer for sale to the AVM value, the comparison of which is already recognized in the prior art. One of ordinary skill in the art who invests in real estate, such as those that "flip" homes (fix them up and sell them for profit), is clearly going to be interested in properties that are offered for sale at a price that is below their AVM value. That situation may indicate that the given property is a good buy as it is being sold at a lower price than it is valued at. If you can buy a house for $200,000, that is really valued at $250,000, that may be a good purchase. The claimed limitations are considered obvious for these reasons.

For claim 95, in an effort to fully address all issues and as an alternate to the 102 rejection for claim 95, if one felt this limitation were not taught in the prior art, in view of

the fact that one would obviously like to have current and accurate AVM values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the AVM values that are stored in the database updated with some amount of frequency as is claimed so as to be generally current. Updating data is something that is well within the knowledge of one of ordinary skill in the art and is considered obvious to one of ordinary skill in the art. Having updated data is something that is desirable, so that you have updated values that are current. This is nothing new.

For claim 100, Foretich discloses data for residential properties, such as single-family homes, townhouses, and condominiums. See paragraph 66 where this is disclosed. Foretich discloses the claimed elements. The language reciting that the database contains records "in a county" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The geographic boundaries set by people lend no structure to the claimed system. Data is data, the mere fact that humans recognize jurisdictions such as counties and states does not change what is claimed, which is property data records stored in the database (single family homes, townhouses, and condominiums). Foretich discloses structure that satisfies what is claimed.

For claims 80,81,82,97, Foretich discloses data for residential properties, such as single-family homes, townhouses, and condominiums. See paragraph 66 where this is disclosed. Foretich discloses the claimed elements. The language reciting that the database contains records "in a county" or "in at least two counties" or "in at least two states" is noted, but is not reciting any further structure to the claimed system. This

language defines nothing further to the data being stored, or to any structure of the system itself. The geographic boundaries set by people lend no structure to the claimed system. Data is data, the mere fact that humans recognize jurisdictions such as counties and states does not change what is claimed, which is property data records stored in the database (single family homes, townhouses, and condominiums). Foretich discloses structure that satisfies what is claimed.

For claim 112, Foretich discloses a system and method for determining AVM values for properties, such as residential properties. Foretich determines valuation values by using a computer program contained on a server, see paragraph 26. Foretich discloses that customers use remote terminals 10,20 (or other types of communication devices) to access the property valuation system via the Internet 50. See paragraph 25 where this is disclosed. The claimed "one or more databases" that contain records on a plurality of residential properties are the databases 60 and/or 70. See paragraph 26 where the databases are disclosed. The databases store records relating to residential properties as claimed. As an example, see Table 1 where various types of stored property data are disclosed and in paragraph 44 this is referred to as a property record. This property record data includes property identifiers, such as address, listing ID, or even a tax record, which satisfies the claimed "identifier of a respective property". Foretich discloses the storing of property identifiers that identify the various properties stored in the databases. With respect to the AVM value being stored in the database, applicant is referred to paragraphs 15 and 162 where this is disclosed. Paragraph 15 discloses "*knowledge base databases created and maintained by the system of the*

present invention may include valuation values and comparable information previously calculated and used by they system of the present invention". Paragraph 162 discloses "*Another aspect of the present invention which has been referred to herein is the fact that the system of the present invention, using either local or remote databases, can store various classes of information derived during the valuation process for use in later valuations or other processes. For example, as the system generates valuations, it is preferable that these valuations and data used in connection with these valuations be stored for later use if desired. Actual valuation numbers may be stored and may be employed as comparables for later valuations as appropriate as long as property information is either stored directly in the knowledge base database or can later be retrieved from other databases such as MLS and/or public record databases.*". Foretich discloses that the AVM values are stored in the databases, which satisfies what is claimed. The language reciting that the database "contains records on a plurality of residential properties in a first geographic region" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The "query device" is considered to be the server 90, that is coupled to the databases and is responsible for running the software applications that control the operation of the invention of Foretich, such as the software that performs the property valuations. See paragraph 26 where server 90 is disclosed. The "display device" that is configured to provide display information (the results) is interpreted to be the portion of the server 90 that is responsible for providing the query results to an input/output device (i.e. modem), so that the results can be sent

via the Internet to the customer. The "input/output device" is the hardware and software that is necessarily required to allow data communication to occur via the Internet, such as a modem, a databus, and the associated software that allows for the output of data to occur. This structure also allows for the receipt of query terms from customers as claimed. The system of Foretich inherently has an input/output device because of the fact that the query results are output. The query results can be sent over the Internet to the requestor (customer) or can be printed, both of which required an output device.
In paragraph 15, it is disclosed that the databases are "continuously updated", and this includes the databases that have the stored AVM value. This satisfies what is claimed with respect to the AVM value generating device that is configured to update the AVM values. Because it is disclosed that the AVM values are updated, there is necessarily a device that is doing the updating. *Not disclosed is that the query device is configured to perform a "differential value search (DVS)".* Applicant has claimed that the DVS is based on a difference between a property's AVM (valuation) and an offer for sale for the property. Conceptually, this is a comparison of the price that one is selling a home for, to the valuation value (AVM) for that home. The examiner notes that paragraph 162 discusses the storing of AVM values in the databases. Disclosed is that the valuations are stored "*for later use*" and "*for use in later valuations or other processes*" and "*may be employed as comparables for later valuations as appropriate*". This paragraph teaches the desirability of storing the AVM value so that that AVM value can be used in later processing. Paragraph 15 also discusses the use of AVM values in further processing. The AVM value is a type of data that a person of ordinary skill in the art is

going to be concerned with. Anyone buying a house or giving out a financial loan for a house, is concerned with the value of the house itself (valuation/AVM). That idea is just common sense and is something that anyone who buys products of any kind recognizes. As a purchaser of a given product, you take into consideration the sale price for the product and decide if that price is acceptable for the "value" of the product that you are to receive. In other words, a purchaser asks the question "is the product worth the price?". The importance of the AVM value is also evidenced by paragraph 6, where it is disclosed that "*Since the loan to value ratio is of great significance to lenders in making loan decisions as well as in determining applicable loan programs and interest rates, it is almost always necessary for a property valuation to be undertaken in connection with the lending process.*" One of ordinary skill in the art, such as a mortgage broker, is interested in the comparison of the price for a given property to the value of that property. In this case, the loan value for a mortgage lender is essentially the "offer for sale" price, as this is the price the seller is willing to sell the property for. The mortgage lender is making a comparison of the offer for sale (loan value) value to the value of the property, which is determined by the valuation process that is performed by server 90. While this comparison is disclosed as being a ratio, it does teach the comparison of the two claimed types of data (offer and AVM). The prior art and one of ordinary skill in the art already recognize the importance of comparing the offer price to the valuation for real estate property. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Foretich to allow for a search of the database based on a difference between a

property's "offer for sale" price and the valuation value for that property, that is also stored in the database. Both the offer price and AVM value are going to be stored in the database, this is disclosed by Foretich. One of ordinary skill in the art at the time the invention was made, taking into account the disclosure of Foretich, and taking into account the level of knowledge that one of ordinary skill in the art is in possession of, would have found it obvious to allow for searching based on the difference between the offer price and the valuation (AVM) that is stored in the database as this is another way that one can compare the offer for sale to the AVM value, the comparison of which is already recognized in the prior art. One of ordinary skill in the art who invests in real estate, such as those that "flip" homes (fix them up and sell them for profit), is clearly going to be interested in properties that are offered for sale at a price that is below their AVM value. That situation may indicate that the given property is a good buy as it is being sold at a lower price than it is valued at. If you can buy a house for $200,000, that is really valued at $250,000, that may be a good purchase. The claimed limitations are considered obvious for these reasons.

For claim 112, in an effort to fully address all issues and as an alternate to the citation of paragraph 15 for the updating of AVM vlaues, if one felt this limitation were not taught in the prior art, in view of the fact that one would obviously like to have current and accurate AVM values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Foretich with an AVM updating device (software routine also) so that the AVM values that are stored in the database are updated with some amount of frequency so as to be generally current.

Updating data is something that is well within the knowledge of one of ordinary skill in the art and is considered obvious to one of ordinary skill in the art. Having updated data and providing a device with the ability to update data is something that is desirable, so that you have updated values that are current. This is nothing new.

18. Claims 77,78,83,86,87,98,99,103, are rejected under 35 U.S.C. 103(a) as being unpatentable over Foretich et al. (20030191723), as applied to each claim's respective dependent claim, and further in view of Florance et al. (20040030616).

For claims 77,78,83,86,87, with respect to the claim reciting that geographic information is contained in the database (Table 1), Foretich can locate properties by identifying an address, a tax record property reference, or a property ID number, see paragraph 35. An address and a property ID number is geographic location information that satisfies what is claimed. This data identifies a particular location, which is the location of property. The examiner also notes that Table 1 lists data of "directions" which would also constitutes geographic location information as directions provide guidance to a particular location. Also in Table 1 on page 5 is the latitude and longitude entry for the property record. Foretich discloses what is claimed with respect to the geographic information. *Not disclosed is that the display device is configured to provide information that allows a remote terminal to render a map of a geographic region as is claimed.* Florance discloses a real estate system that provides users with real estate information in response to search queries submitted by users. The query results are displayed to the user in the form of maps, as is disclosed in paragraphs 347 and 348,

and shown in figure 58. These paragraphs disclose that the displayed maps allow for the display of the location of the property on a map by the use of icons and other indicators. Paragraph 348 states that when the user positions the computer mouse over an icon (that represents a property), *the system displays a pop-up window providing information on the associated property* (as best understood this satisfies "spatially embedded"). It is also disclosed that this feature allows the user to view the overall region in which the property is location (a desirable feature), as well as the ability to zoom in and out on the map of the property (another desirable feature). Florance teaches a very desirable manner by which the results of a property search query may be displayed to the user, namely the use of maps as claimed. In Foretich, the results of the submitted query are provided to the customer, it is just not disclosed that this is done by using a map as applicant has claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a map with pop up windows as is disclosed by Florance, so that the results of the query can be presented in a more user friendly format to the user, including the resulting AVM value. This is desirable because it would allow for the viewing of the overall region where the property is located, it would allow for the zooming in and out, as disclosed by Florance, as well as the convenient use of pop-up windows for the display of property related information, such as the AVM (see claim 83).

For claims 98,99,103, not disclosed is the step of providing information that allows a remote terminal to render a map of a geographic region as is claimed. Florance discloses a real estate system that provides users with real estate information

in response to search queries submitted by users. The query results are displayed to the user in the form of maps, as is disclosed in paragraphs 347 and 348, and shown in figure 58. These paragraphs disclose that the displayed maps allow for the display of the location of the property on a map by the use of icons and other indicators. Paragraph 348 states that when the user positions the computer mouse over an icon (that represents a property), *the system displays a pop-up window providing information on the associated property* (as best understood this satisfies "spatially embedded"). It is also disclosed that this feature allows the user to view the overall region in which the property is located (a desirable feature), as well as the ability to zoom in and out on the map of the property (another desirable feature). Florance teaches a very desirable manner by which the results of a property search query may be displayed to the user, namely the use of maps as claimed. In Foretich, the results of the submitted query are provided to the customer, it is just not disclosed that this is done by using a map as applicant has claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a map with pop up windows as is disclosed by Florance, so that the results of the query can be presented in a more user friendly format to the user, including the resulting AVM values. This is desirable because it would allow for the viewing of the overall region where the property is located, it would allow for the zooming in and out, as disclosed by Florance, as well as the convenient use of pop-up windows for the display of property related information for given properties, such as the AVM values.

19. Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foretich et al. (20030191723) in view of Frost (2005/0273346).

Not disclosed is that the query instructions are generated by software that allows a user to designate a region on a map as claimed, where the region designated by the user is used as query input. Frost is directed to a real estate information system that allows a user to submit a search query by selecting a portion of a map with a map selection tool 870. See paragraph 192 and 193 where this is discussed. This allows for a user to select a given region on the map and then the system will identify the properties that are in that region. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Foretich with the ability to take location information from the user by using a map with a box selection tool as is disclosed by Frost. This would then provide a convenient and user friendly way for the user to enter location information to identify either a specific property, or to identify a given region, such as a neighborhood or development when a person is submitting a plurality of queries (batch requests, see para 41 of Foretich). This would be especially desirable from a batch-processing standpoint.

20. Claim 94,102,107, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklarz et al. (2002/0087389) in view of Robbins (20010039506).

For claims 94,102,107, not disclosed is that the system provides information to the remote terminal to enable it to display a measure of confidence as to the accuracy of the respective AVM value. Robbins is directed to a system that performs AVM

calculations. In paragraph 179, it is disclosed that it is known to provide statistical data that reflects confidence in the calculated value. Also see paragraph 181. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Sklarz with the ability to send the customer data that indicates "confidence" in the calculated AVM, as is disclosed by Robbins. This is desirable so the user has some level of assurance as to the accuracy and acceptability of the resulting AVM.

21. Claims 83,86,87,103, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sklarz et al. (2002/0087389) in view of Florance et al. (20040030616).

For claim 83, with respect to the language reciting that the database has a 3rd field containing geographic information, Sklarz contains this kind of data because the MLS data contains location information, such as an address. The examiner takes "official notice" of this fact. Also see paragraph 74 where it is disclosed that data such as the state and county are stored. This is needed so that you can search for properties by county within a state, see figure 3. This requires that there be geographic location information stored as claimed, so that the query can be processed using the correct set of data (for the region chosen). Sklarz discloses this limitation. Also, the examiner notes that the geographic location information is directed to non-functional descriptive material that is not functionally related to the rest of the claim scope. This data is just descriptive in nature and is not functionally related to any actions that the claimed elements to the system are configured to perform. Claim 83 is directed to non-functional descriptive material in this sense.

For claims 83,86,87,103, *not disclosed is that the display device is configured to provide information that allows a remote terminal to render a map of a geographic region as is claimed.* Florance discloses a real estate system that provides users with real estate information in response to search queries submitted by users. The query results can be displayed to the user in the form of maps, as is disclosed in paragraphs 347 and 348, and shown in figure 58. It is disclosed that the maps allow for the display of the location of the property on a map by the use of icons and other indicators. Paragraph 348 states that when the user positions the computer mouse over an icon (that represents a property), *the system displays a pop-up window providing information on the associated property* (as best understood this satisfies "spatially embedded"). It is also disclosed that this feature allows the user to view the overall region in which the property is location (a desirable feature), as well as the ability to zoom in and out on the map of the property (another desirable feature). Florance teaches a very desirable manner by which the results of a property search query may be displayed to the user, namely the use of maps as claimed. In Sklarz, the results of the submitted query are provided to the customer, it is just not disclosed that this is done by using a map as applicant has claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a map with pop up windows as is disclosed by Florance, so that the results of the query can be presented in a more user friendly format to the user, including the resulting AVM value that is generated in Sklarz. This is desirable because it would allow for the viewing of the overall region where the property is located, it would allow for the zooming in and out, as well as the convenient use of

pop-up windows for the display of property related information, such as the AVM (see claim 83) as is disclosed by Florance.

22. Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sklarz et al. (2002/0087389) in view of Frost (2005/0273346).

Not disclosed is that the query instructions are generated by software that allows a user to designate a region on a map as claimed, where the region designated by the user is used as query input. Frost is directed to a real estate information system that allows a user to submit a search query by selecting a portion of a map with a map selection tool 870. See paragraph 192 and 193 where this is discussed. This allows for a user to select a given region on the map and then the system will identify the properties that are in that region. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Sklarz with the ability to take location information from the user by using a map with a box selection tool as is disclosed by Frost. This would then provide a convenient and user-friendly way for the user to enter location information to identify either a specific property, or to identify a given region, such as a neighborhood or development.

23. Claims 75,83,86,92,93,95,98,101,103, are rejected under 35 U.S.C. 103(a) as being unpatentable over "Appraisers are Learning to Live With Black Box Technology" (Quinn) in view of the NPL document "Information on Fairfax County Property Assessment" (FCPA).

For claims 75,95, Quinn discloses that Fairfax County used AVM values for tax assessment purposes, i.e. "*where AVMs were used for tax assessment purposes*". The assessed tax value is referred to as being a "computer assisted assessment", which is the same as an AVM (a computer-generated value). This is an AVM as is known in the art. This fact is even recognized at the beginning of the article in the sentence "*It looks like automated valuation models, so called AVMs, the black boxes of the appraisal industry, are here to stay*". Not disclosed is that the AVM values (the tax assessed value) are able to be queried over a public network, such as the Internet, along with the resulting structure of the system. The document FCPA discloses that in 1998, Virginia law authorized the dissemination of public records via the Internet. The document states that the tax assessment records for property in Fairfax County are considered to be "public information", and further that the release of this information is authorized over the Internet by Virginia law. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tax assessment information (the AVM value which is the tax assessed value) for Fairfax County over the Internet in the manner disclosed by FCPA, so that this "public information" can be easily obtained by citizens as was authorized by Virginia law. Virginia law authorized the dissemination of the tax assessment information over the Internet, and this includes the AVM value of Quinn. The AVM is public information. The result of this prior art combination is that the AVM values for each property in Fairfax County are available on the Internet. This 103 combination results in there necessarily being a database that has property records that contain a property identifier as well as an AVM value (tax assessment value). To

be able to obtain data over the Internet, like the FCPA document discloses, a database to store the information is necessarily required; otherwise you cannot provide the information over the Internet. The claimed one or more database is inherent to the resulting structure of the prior art combination. The AVM value has already been addressed and is the tax assessment value, so this data is inherently going to be saved in the database. The property identifier is also inherent because it is disclosed that a person can search by a property address, or even by using a 14 character series of numbers that identify various properties (map reference number). This necessarily requires that there be property identifier data stored on the database as is claimed. Also considered inherent is the recited query device. This is because FCPA allows for one to do a property search by submitting a query. A person can submit a request for the tax-assessed value of any property in Fairfax County, which is a request for the AVM value that Fairfax County is disclosed as using. To be able to process this request, a query device is necessarily required, such as a database server. The same is true for the display device and the input/output device. They are required to be able to receive query over the Internet (for an AVM value for property) and to output results. The display device that provides information is the device that would inherently be required to get the results to the modem (input/output device) that allows for connection to the Internet. The structure that is required to be able to provide AVM values (tax assessment) over the Internet is that which is claimed.

For claim 75 in addition to that already addressed above, the system that is used to actually arrive at the AVM value (the computer that does the valuation) is inherently

configured to routinely update the AVM as each tax year passes by, which satisfies what is claimed. The AVM values for the properties in the database are "generally current" as claimed. They are the most recent numbers that are available, which satisfies "generally current". They are repeatedly calculated on an annual basis. This limitation also depends directly on the market conditions and how rapidly they are changing or not changing. In a stagnant housing market where prices are not going up or down a yearly calculation will satisfy what is claimed.

For claim 95 in addition to that already addressed above, the AVM values are updated routinely, namely yearly. This satisfies the broad claim language. The yearly AVM value that is generated by Fairfax County is a value that reflects the changes in the housing market as claimed. This limitation also depends directly on the market conditions and how rapidly they are changing or not changing. In a stagnant housing market where prices are not going up or down a yearly calculation will satisfy what is claimed.

For claims 92,93,101, the language reciting that the database contains records "in a county" or "in at least two counties" or "in at least two states" is noted, but is not reciting any further structure to the claimed system. This language defines nothing further to the data being stored, or to any structure of the system itself. The geographic boundaries set by people lend no structure to the claimed system. Data is data, the mere fact that humans recognize jurisdictions such as counties and states does not change what is claimed, which is property data records stored in the database. The prior art combination has property data in a database and this satisfies what is claimed.

For claims 83,86,98,103, it is disclosed that a map is displayed to the user, see page 7 of FCPA. Disclosed is a map that is of a given geographical region. The map also has icons as claimed (a broad term referring to any kind of visual representation on the map). As this claim is best understood by the examiner, the prior art satisfies what is claimed.

24. Claims 87,105, are rejected under 35 U.S.C. 103(a) as being unpatentable over "Appraisers are Learning to Live With Black Box Technology" (Quinn) in view of the NPL document "Information on Fairfax County Property Assessment" (FCPA) and further in view of Frost (2005/0273346).

Not disclosed is that the query instructions are generated by software that allows a user to designate a region on a map as claimed, where the region designated by the user is used as query input. Frost is directed to a real estate information system that allows a user to submit a search query by selecting a portion of a map with a map selection tool 870. See paragraph 192 and 193 where this is discussed. This allows for a user to select a given region on the map and then the system will identify the properties that are in that region. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Quinn and FCPA (as combined) with the ability to take location information from the user by using a map with a box selection tool as is disclosed by Frost. This would then provide a convenient and user-friendly way for the user to enter location information to identify either a specific property, or to identify a given region, such as a neighborhood or development.

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. "*Automated Valuation Models-threat and opportunity*" discloses the fact that some AVMs allow for human input and some do not. See page 2 under "What about appraiser/user input?". This reference states that "*Some AVMs allow user input, such as changing square footage or inputting a time adjustment, and other don't allow any input. The main reason for not allowing user input is to eliminate the human element from valuation. These AVMs are seen as "pure" without human errors and bias*".

26. Applicant's arguments filed 10/19/07 have been fully considered but they are not persuasive.

With respect to the reference "The Big AVM Lie", the position of the examiner has not changed. The reference and applicant's arguments have been considered but are not seen as persuasive. The Fairfax County article (Quinn) must be considered for what it teaches. This is the central issue and the article "The Big AVM Lie" does not change what Quinn discloses. The content of "The Big AVM Lie" is insufficient to render the claims allowable.

With respect to what applicant has labeled as IDS #2, applicant has requested that the examiner explain why it was ignored. It was not ignored, it has been considered, but is not seen as overcoming any of the rejections of record. It is not relevant to the current issues at hand.

With respect to the "Realtor Workstation" reference, if applicant wants it considered on the record, then a legible copy needs to be submitted for consideration. Just because another examiner cited this reference in a related PCT application does not mean that the instant examiner has to obtain a copy of the reference from the PCT examiner. To date this reference has not been made of record.

With respect to the new matter issue (112,1st) and objection to the amendment under 35 USC 132, the argument that "*if a system is capable of discriminating among big dogs and small dogs, as well as capable of discriminating among white dogs and brown dogs, it would naturally imply the capacity to discern big brown dogs from other dogs*" is very unclear and is not persuasive. This application does not deal with dogs and the examiner honestly has no idea what applicant is attempting to argue. The objection to the amendment remains and the new matter issue remains. The examiner notes that applicant has not addressed the issue at hand in the 112,1st rejections as far as support for "one or more icons each associated with at least one second property" (claim 77); "a plurality of icons each associated with a second property" (claim 78) within the map; an icon, an AVM value, and a DVS value as claimed on the map, for a total of three things which is in the scope of claim 99. These issues remain.

With respect to applicant's arguments about AVMs versus appraisals, the argument and definitions cited are noted but are not persuasive because the prior art discloses AVMs (as will be addressed) not appraisals. The examiner notes that applicant has cited the Appraisal Foundation as stating that "*An AVM is a tool that delivers and estimation or calculation*". This is entirely consistent and commensurate

with how the examiner has interpreted this term and is consistent with the applied prior art. The argument that because human judgment may be involved in the process this then means that the result is an appraisal and not an AVM is not persuasive. Even if one simply identifies an address for the subject property and then the valuation is run, human judgment was necessarily involved during the writing of the computer code. The computer program must be told what kinds of comparables to use and how to go about the valuation (what equations to use and how they are written), how many comparables are to be used, in what geographic region are the comparables taken from, how much to weight various factors, etc.. Separating human judgment from an AVM is simply not possible, especially because human judgment is necessarily involved during the writing of the valuation equations that are used to calculate the AVM value themselves. Also, the examiner is citing a definition for AVM on the Internet that does not support the position taken by applicant and indicates that there can be human judgment involved in the AVM process. "*Automated Valuation Models-threat and opportunity*" discloses the fact that some AVMs allow for human input and some do not. See page 2 under "What about appraiser/user input?". This reference states that "*Some AVMs allow user input, such as changing square footage or inputting a time adjustment, and other don't allow any input. The main reason for not allowing user input is to eliminate the human element from valuation. These AVMs are seen as "pure" without human errors and bias*". This is evidence that some AVMs can involve human input (judgment) and some do not. What applicant appears to be arguing is what the reference calls a "pure" AVM versus other types of AVMs. Also, as stated previously, the specification as originally

filed did not set forth that applicant intended the term "AVM" to exclude any human involvement/judgment. The term is given its recognized meaning as is known in the art, which is an automated process of calculating an estimation of the value of a property. The argument is not persuasive. Also, the claims recite the value as already being calculated so to argue that one value (i.e. $100,000) is different from another (i.e. $100,000) just because of how they are arrived at, is not persuasive. The values in the claims have already been calculated and are only claimed as being stored. How they are arrived at has nothing to do with the scope of the claims anyway. A value is a value. The examiner believes this point to be moot because the prior art discloses AVMs but wanted to address it on the record.

With respect to applicant requesting that the examiner cite the proper legal authority that requires them to define terms in the specification, applicant is correct in that they do not have to define terms in the application; however, you cannot try to define the term in some very specific manner after the application has been filed as applicant is attempting to do. The term "AVM" has been given the recognized definition that is known in the art, "*An AVM is a tool that delivers and estimation or calculation*". Also as will be addressed more fully, the prior art discloses AVM values.

With respect to the traversal of the 101 rejection, it is not persuasive. The examiner has already cited the authority for this kind of rejection so requesting more citations is not persuasive. Ex parte Lyell 17 USPQ2d 1548 (Bd. Pat. App. & Int 1990) ; IPXL Holdings, L.L.C. v Amazon.Com, Inc., 430 F.3d 1377, 1384 (Fed. Cir. 2005). The examiner again suggests claiming that the structural element responsible for this

function (possibly the query device?) is "*configured* to repeatedly update the AVM values based on changes in the relevant housing markets" to overcome this rejection, as was done in the last office action. The limitation in question is a method limitation of doing AVM value updating, in an apparatus type of claim. This is not proper and renders the claim as non-statutory. In a system claim there cannot be any updating occurring, which is what applicant is claiming. The rejection will be maintained.

For the 112,2nd rejection, the examiner notes that the basis for rejection of claims 94 and 96 have not been argued and the claims have not been amended to correct the noted problems. Applicant has not addressed the rejection for claims 94 or 96 in any manner. These rejections are maintained. With respect to the traversal for the rejection to claims 76 and 96, it is not persuasive. How can you do a DVS with just the AVM value, when a DVS requires two numbers? The examiner does not see how this is possible. Applicant is claming that a DVS is performed in method claim 96, which requires more than just an AVM value, but the claim never recites an offer for sale or sale price as being present. You cannot do the DVS without two numbers being present and the scope of claim 96 (a method claim) only recites one number. The rejection is being maintained.

With respect to the traversal regarding the Quinn reference ("Appraisers are Learning to Live With Black Box Technology"), the arguments are not persuasive. The main issue that the examiner is concerned about is the fact that this article mentions the use of AVMs. This fact cannot be ignored and arguing that this was never actually practiced by Fairfax County is not persuasive. A prior art disclosure must be considered

for what it states and teaches, regardless of whether or not it is correct or was ever actually practiced in the public domain. Submitting copies of Fairfax County budgets and arguing what they actually used as far as tax evaluation software still does not change the fact that this article discloses and mentions the use of AVM values. Prior art is not only usable when one proves the disclosure was actually really practiced in real life. There are lots of patents that were never actually put into use in the public domain but their disclosures can still be relied upon for what they teach. There does not have to be proof that they actually used AVMs for tax purposes for the examiner to be able to use this reference. With respect to the argument that a yearly tax evaluation, such as done by Fairfax County is not "generally current" is not persuasive. This language is broad and directly depends on how much the housing market is changing over a given period of time. The Quinn article satisfies this language in the opinion of the examiner as this language is broad and very much depends on how much the housing market is changing over a given period of time. With respect to claim 89, which is a system (apparatus) claim, citing Fairfax County law is not persuasive. The system *has the ability* to update AVM values which satisfies what is claimed. Claim 89 is not a method claim and there is no updating occurring as this language has been interpreted to be reciting *the mere ability to update* AVM values, which is found in the prior art. With respect to political boundaries and borders between states and counties, this has nothing to do at all with the claimed system. Applicant is reminded that claim 89 is an apparatus type of statutory claim. Applicant is claming a computer system for providing AVM values. What structure does applicant feel that this language about political

boundaries lends to the claimed system? Applicant's arguments are noted but are not found as persuasive for this language about political boundaries. The argument for claim 105 that Fairfax County has no obligation to do what is claimed is not the proper standard to be taken. The issue is obviousness, not whether or not they were obliged to do any particular thing. The examiner does not have to provide any legal authority that authorizes or mandates Fairfax County to do what is claimed in claim 105. This is an improper standard to try to impose upon the examiner. The issue is obviousness, and whether or not it was obvious to do what is claimed, not obligations under the law. Lots of things are not mandated or required by law and are still found to be obvious. This argument is not persuasive and is not the proper standard for obviousness.

With respect to the traversal of the Sklarz reference it is not persuasive. In the petition to make special that was filed by applicant, it was stated:

"**United States Publication No. 2002/0087389 to Sklarz et al**.

("Sklarz") discloses a system and method for enabling a prospective seller to perform various computer-assisted real-estate valuations. The only substantive discussion of AVM in Sklarz relates solely to enabling prospective sellers to use AVM-related tools to produce a single AVM value - that of a property that the prospective seller wishes to market. See, paras [0012], [0014] and [0250]-[0253]. "

Applicant has already admitted on the record that Sklarz discloses the use of AVM values and to now argue that this reference does not disclose AVM values is not persuasive. Applicant argues that the paragraphs cited by the examiner are a full 37 paragraphs away from any AVM related text. This has nothing at all to do with what is

disclosed by the reference as a whole. The entire Sklarz reference is being used to reject applicant's claims, not just selected paragraphs standing all alone. The reference must be considered for what it teaches as a whole. Sklarz uses computers and software to provide a valuation, which is an AVM. This is also mentioned in paragraph 18 where it is disclosed that an algorithm is used to calculate the valuation. An AVM value is known in the art as a computer generated value that approximates the value of a given property. "AVM" is a term that applies to a broad host of valuation methodologies. Any valuation that is computer generated can reasonably considered to be an AVM as this is a broad term. The examiner also notes that applicant has cited the Appraisal Foundation as stating that "*An AVM is a tool that delivers an estimation or calculation".* This is entirely consistent and commensurate with how the examiner has interpreted this term and is consistent with the applied prior art. This is exactly what Sklarz discloses. Upon a fair reading of the reference as a whole it is apparent that Sklarz is producing AVM values. The argument that Sklarz does not disclose AVM values is not persuasive. With respect to the argument about storing the AVM values in a database, the argument is not persuasive. Applicant has argued that queries are mentioned but not AVMs. It is clear that upon a reading of the reference as a whole, the queries mentioned in paragraph 213 are queries for a valuation, namely an AVM. The argument that if human judgment is involved the result cannot be an AVM has already been addressed and is not persuasive. Applicant has argued that a cache is not a database. A database is defined as "a comprehensive collection of related data organized for convenient access, generally in a computer." A cache is clearly a

database as it is a collection of data that is arranged for access by a computer. This is exactly what Sklarz discloses. Applicant has stated that a cache is temporary storage. This "temporary storage" satisfies the claimed database. Any collection of data in any kind of memory can be considered to be a database. The argument is not persuasive. Applicant concludes the traversal of Sklarz by stating that each and every limitation is not shown in Sklarz. Applicant has not addressed or traversed each and every limitation of every claim so this argument is not persuasive.

With respect to Foretich, applicant has argued that Foretich does not disclose the limitation of "*wherein each AVM value of the plurality of properties is modified routinely and at a rate such that the AVM value reflects an estimate designed to be generally current based on changes in the relevant housing market of each property*". With respect to the apparatus claims, this argument is not persuasive because in apparatus claims there are no actions occurring (no updating), because they are not method claims. With respect to the method claims this issue has been addressed and an explanation was provided as to why Foretich either teaches this limitation and alternatively why it is obvious. The rejection of record states that "*For claim 95, in addition to what has already been addressed, see paragraphs 51 and 93 where updates to the database is disclosed, which also satisfies what is claimed.*" Applicant has not addressed this disclosure from Foretich. With respect to obviousness, the examiner stated "*For claim 95, in an effort to fully address all issues and as an alternate to the 102 rejection for claim 95, if one felt this limitation were not taught in the prior art, in view of the fact that one would obviously like to have current and accurate AVM values,*

it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the AVM values that are stored in the database updated with some amount of frequency as is claimed so as to be generally current. Updating data is something that is well within the knowledge of one of ordinary skill in the art and is considered obvious to one of ordinary skill in the art. Having updated data is something that is desirable, so that you have updated values that are current. This is nothing new." Applicant argued that the examiner has not provided any rationale as to why one would update the values. While this seems glaringly obvious to the examiner, the reason is so that you have updated values to work with. Applicant even stated on page 37 of the response that "*As a matter of common sense, no person or lending body will ever rely on any valuation (AVM, appraisal, or otherwise) that reflects anything but a current value of a property. Any valuation of any database of Foretich quickly loses any relevance as a legitimate indicator of current market value. Who, exactly would rely on an appraisal more than six months old?*" The examiner could not agree more with the statement set forth by applicant. The limitation of updating the values to be current is obvious and applicant seems to be in agreement with the examiner on this issue based on their own arguments. Regarding the issue of the differential value search, the arguments are not persuasive. The argument that the rationale from the examiner has apparently escaped the real estate community for decades is noted but is not persuasive. This is not addressing the rationale as set forth by the examiner. The argument that people do not have to access a database of AVMs to buy a house is noted but is not addressing the rejection as set forth by the examiner. The examiner

never stated that people must necessarily consult a database of AVMs. The same is true for a lender who provides a loan, they do not need to use a database of AVMs, but doing so is very desirable. The argument that applicant's representative has provided the examiner with the rationale for the rejection in a personal interview is noted but is not persuasive. While not agreeing to any of applicant's assertions that do not have direct support in the written record, the issue is whether or not this is obvious, not who may or may have not stated various things in an interview. The issue at hand is obviousness. The examiner stated "*The AVM value is a type of data that a person of ordinary skill in the art is going to be concerned with. Anyone buying a house or giving out a financial loan for a house, is concerned with the value of the house itself (valuation/AVM). That idea is just common sense and is something that anyone who buys products of any kind recognizes. As a purchaser of a given product, you take into consideration the sale price for the product and decide if that price is acceptable for the "value" of the product that you are to receive. In other words, a purchaser asks the question "is the product worth the price?". The importance of the AVM value is also evidenced by paragraph 6, where it is disclosed that "Since the loan to value ratio is of great significance to lenders in making loan decisions as well as in determining applicable loan programs and interest rates, it is almost always necessary for a property valuation to be undertaken in connection with the lending process." One of ordinary skill in the art, such as a mortgage broker, is interested in the comparison of the price for a given property to the value of that property. In this case, the loan value for a mortgage lender is essentially the "offer for sale" price, as this is the price the seller is*

willing to sell the property for. The mortgage lender is making a comparison of the offer for sale (loan value) value to the value of the property, which is determined by the valuation process that is performed by server 90. While this comparison is disclosed as being a ratio, it does teach the comparison of the two claimed types of data (offer and AVM). The prior art and one of ordinary skill in the art already recognize the importance of comparing the offer price to the valuation for real estate property. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Foretich to allow for a search of the database based on a difference between a property's "offer for sale" price and the valuation value for that property, that is also stored in the database. Both the offer price and AVM value are going to be stored in the database, this is disclosed by Foretich. One of ordinary skill in the art at the time the invention was made, taking into account the disclosure of Foretich, and taking into account the level of knowledge that one of ordinary skill in the art is in possession of, would have found it obvious to allow for searching based on the difference between the offer price and the valuation (AVM) that is stored in the database ***as this is another way that one can compare the offer for sale to the AVM value, the comparison of which is already recognized in the prior art.*** *One of ordinary skill in the art who invests in real estate, such as those that "flip" homes (fix them up and sell them for profit), is clearly going to be interested in properties that are offered for sale at a price that is below their AVM value. That situation may indicate that the given property is a good buy as it is being sold at a lower price than it is valued at. If you can buy a house for $200,000, that is really valued at $250,000, that may be a good*

purchase. The claimed limitations are considered obvious for these reasons." The examiner does not see any persuasive rebuttal to this obviousness analysis and rejection. The argument regarding the combination of Foretich and Florance is noted but is not addressing the rejection of record. The statement that Foretich thought the limitation of claims 77,78,83, and 86 was unnecessary does not seem to be supported by the disclosure of Foretich. Where does Foretich state such? The reasons for providing Foretich with the ability to render maps, etc., is so that the query results are presented in a more user friendly manner. This feature is already known in the art and is not new. The argument about economic price is noted but is not persuasive as this has not much at all to do with whether or not something is obvious to do or try. The argument that these features do not come free is also not persuasive. Costs involved does not mean things are not obvious.

Applicant's arguments about KSR are noted. The allegations that the examiner could not have had a chance to review PTO guidelines is assumption and not persuasive. Applicant then argues that the examiner has not identified each and every limitation from the claims. The examiner disagrees and feels that the office action and rejections contained therein are clearly explained and that all claim limitations are addressed.

With respect to the rejections involving Robbins and Frost, they have not been addressed on the merits. They are deemed to be proper absent a traversal. 37 CFR 1.111.

With respect to the 37 CFR 1.131 declaration, it is not persuasive and is found to be deficient. The 131 declaration is not addressing the entire scope of the independent claims and does not address any of the dependent claims at all. The claims are not just reciting the storing of an AVM value, which is essentially what applicant has provided as alleged evidence of prior conception. The independent claims also recite the use of a "public network" and "updating" of AVM values. These limitations are not addressed in the 131 declaration but are claimed. Simply storing AVM values does not support the notion of providing the AVM values over a public network. It may be just local storage where no network is involved. The updating language is not addressed at all either. Applicant has the burden of providing evidence to the examiner and clearly explaining what it shows and how this supports the scope of the claim as a whole. Also, what about all of the dependent claims? Nothing has been shown about any of the dependent claims so even if the 131 was persuasive for the independent claims, it is not persuasive for the dependent claims as each claim stands on its own and is accorded its own filing date. If you move back the effective date of the independent claim this does not automatically also apply to the dependent claims where different features are recited. Applicant is submitting a 131 declaration that is not addressing the scope of the claims as applicant has amended them and as they currently stand pending. The examiner also notes and reminds applicant that a 131 declaration has not affect on a 102 rejection, so any of the 102 rejections cannot be overcome by a 131 declaration anyway. Also, the references that applicant is trying to swear behind are not even being used to reject the claims so the entire matter seems somewhat moot to the examiner.

The 131 declaration is found deficient for these reasons. Applicant is referred to MPEP 715 where 37 CFR 1.131 declarations are discussed in detail as far as who must sign one, what must be shown in the evidence, etc..

With respect to the 37 CFR 1.132 declaration submitted by William Kennedy (5 pages total), it has been considered but is not found to be persuasive to overcome any of the obviousness rejections, and specifically does not overcome the rejection concerning the differential value search. The submitted evidence shows that "HomeKeys" was one company out of 66 companies that were nominated for the 2005 Inman Innovator Awards. While the evidence does mention "ValueSearch" in relation to HomeKeys, it is not really stated why HomeKeys was actually nominated and the examiner is not clear as to what the actual alleged praise from peers is really directed to. Just the nomination alone without some nexus between the actual specific reason for the nomination and the claimed invention is not persuasive evidence in the opinion of the examiner. The evidence on page 5 shows that the award HomeKeys was nominated for was a new business model. What exactly is meant by "new business model" is not very clear. The evidence does not show that the differential value search itself was the actual reason for the nomination; it very well may be for other reasons that are associated with HomeKeys and their business. Also, in weighing the evidence against the issue of obviousness even if the nomination was for the differential value search, the examiner does not see this as sufficient evidence to overcome the 103 rejection because of what the prior art teaches and the knowledge of one of ordinary skill in the art.

With respect to the 37 CFR 1.132 declaration submitted by William Kennedy (24 pages total), the examiner does not find it to be persuasive to overcome the 35 USC 103 rejection. With respect to the allegation of copying overall, the examiner notes that the reference to Florance used in the prior art rejection with respect to maps and icons for showing real estate properties goes back to the year 2000. Did it ever occur to applicant that Zillow actually copied the idea of a geographical representation with icons from Florance? This is quite possible. This concept was already known in the art prior before being used by both Zillow and the instant applicant. Attachment A (2 pages) which was relied upon in the declaration, is not legible at all and cannot be reviewed for what it allegedly shows. With respect to the contact by email and by phone, the email which was submitted as evidence seems to be more of an automated response to a general information request and is not specific in content to any alleged conversation about any copying. To the examiner the email is evidence of not much at all. With respect to the phone conversation, all the examiner has been given to consider is the statements of the declarant. The declarant is clearly a biased individual because of their employment at HomeKeys, and while this alone is not a reason to discount or minimize any allegations made by the declarant, this must be taken into account by the examiner. The only evidence of the phone conversation is from the declarant and is not found to be persuasive evidence. MPEP 716.06 discusses evidence of copying and 132 declarations and makes it clear that more than just copying is required for this type of secondary considerations to be persuasive evidence of non-obviousness. Copying may be attributable to other factors other than the non-obviousness of the limitations in

question. Any alleged copying may have occurred because of contempt for applicant's ability to enforce any patent that would possibly issue from this application, or may have occurred out of a lack of concern for patent property. In those cases, copying alone is not necessarily evidence of non-obviousness. Also, it is not clear to the examiner that the copying was "identical" to the claimed product, another issue that is required for any alleged copying to be persuasive evidence of non-obviousness. The visits to the HomeKeys website were possibly due to somebody looking to buy a home in Florida. Applicant argues that this situation is not likely, but this also means that it is a possibility. As stated previously by the examiner, visiting a website does not necessarily mean or result in copying. The allegations of copying are noted but are not found to be persuasive evidence of non-obviousness.

With respect to the 132 declaration submitted by William Kennedy (14 pages), it is also found to be non persuasive. Just as with the previously discussed 132 declaration, MPEP 716.06 discusses evidence of copying and makes it clear that more than just copying is required for this type of secondary considerations to be persuasive evidence of non-obviousness. Copying may be attributable to other factors other than the non-obviousness of the limitations in question. Any alleged copying may have occurred because of contempt for applicant's ability to enforce any patent that would possibly issue from this application, or may have occurred out of a lack of concern for patent property. In those cases, copying alone is not necessarily evidence of non-obviousness. Also, it is not clear to the examiner that the copying was "identical" to the claimed product, another issue that is required for any alleged copying to be persuasive

evidence of non-obviousness. With respect to the statement #6 that Zillow quickly surpassed Realtor.com, this is not necessarily due to any novel subject matter and may be attributable to aggressive marketing on their part. This is not really evidence of non-obviousness. Applicant in statement #7 alleges that their success is due directly to the claimed subject matter. There is no evidence of record that clearly shows that any success by Zillow is due to the claimed subject matter. This statement is not supported by any evidence that shows "commercial success", see MPEP 716.03.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 571-272-6808. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DENNIS RUHL
PRIMARY EXAMINER